

TEA-21 §1216(B) APPLICATION

January 31, 2005

OBJECTIVE AND REQUEST

The Missouri Department of Transportation (MoDOT) is submitting this application under Section 1216(b) of the Transportation Equity Act for the 21st Century (TEA-21), Pub.L.No. 105-85 (1998), and requesting approval from the Secretary of Transportation to participate in the Interstate Reconstruction and Rehabilitation Pilot Program. The facility being requested for consideration for tolling is I-70 from Kansas City to St. Louis, Missouri, a distance of approximately 200 miles.

Recognizing the existing federal apportionments to Missouri and the statewide needs for those funds, it is clear that the reconstruction and rehabilitation of this facility cannot be achieved or functionally improved within a reasonable timeframe without the collection of tolls. Section 1216(b) (3) of TEA-21, Application Requirements, outlines six areas that need to be included in an application to the Secretary. Missouri's approach to these six areas is outlined in a format that is consistent with the FHWA model application. MoDOT specifically asks for a multiple-phase approval. It is understood that each phase will require additional documents for the FHWA's approval. Section G specifically, as well as other sections, outline what MoDOT believes are required deliverables that need to be provided in accordance with a mutually established and agreed upon timeline.

MoDOT and the Missouri Highways and Transportation Commission (MHTC) do not currently have the constitutional authority to administer tolling in Missouri. The General Assembly is considering granting approval for a constitutional amendment to be placed before voters to grant MHTC and MoDOT the authority to build, operate and maintain toll projects. Current enabling legislation includes the Missouri Transportation Corporation Act which allows non-profit corporations to own and operate transportation projects. At present, there are several Transportation Development Districts and Transportation Corporations operating in the state, one of which is already operating a toll facility.

APPLICATION REQUIREMENTS

A. *An identification of the facility on the Interstate System proposed to be a toll facility, including the age, condition, and intensity of use of the facility.*

1. Location

Interstate 70 is located between Kansas City and St. Louis, Missouri, a distance of approximately 200 miles. Terminus for the corridor consists of connections to the Interstate highway systems of the Kansas City and St. Louis metropolitan areas. In the Kansas City area, this logical connection is I-470 (Exit 15). The eastern terminus, located on the western edge of the St. Louis Metropolitan area, is I-64/US 40 (Exit 210) where the existing four-lane to six-lane transition occurs. The metropolitan areas affected include Kansas City, Columbia and St. Louis.

I-70 Project Limits



2. Description of the Project

In compliance with the National Environmental Policy Act (NEPA), a First Tier Environmental Impact Statement was prepared to aid in determining the most appropriate type of improvement concept for I-70. Based on the conclusion of the First Tier process, which included a Draft and Final EIS and concluded with a Record of Decision in December 2001, FHWA approved the selection of a Widen Existing I-70 Strategy for the I-70 Corridor. The selected strategy is environmentally preferred and it involves the improvement and total reconstruction of the existing I-70 roadway.

The modernization of the corridor includes total reconstruction across the state to upgrade the existing corridor to current highway design and safety standards, including a wider median, wider inside and outside shoulders, improved roadway alignment for mainline curves and grades, higher bridge clearances, reconstructed interchanges, improved access management and the ability to expand in the future. Year 2002 traffic operations are generally acceptable in the rural areas but are already at or above capacity in the urban areas of Kansas City, Columbia, and St. Louis, resulting in congested operations. By 2030, travel demands will dictate that six lanes be provided in the rural areas and a minimum of eight lanes through Columbia and in the metropolitan areas of Kansas City and St. Louis. The minimum eight-lane section in metropolitan Kansas City would likely extend to Grain Valley. Similarly, in the St. Louis area, a minimum of eight lanes would need to be provided from Warrenton to the east, into the St. Louis metropolitan area.

Within the NEPA environmental studies and the Missouri Toll Feasibility Study, a range of improvement options was evaluated for the I-70 Corridor. The low range option for improvements to the I-70 Corridor consisted of four lanes in the rural areas, with right-of-way to expand to six lanes when warranted in the future, and six or more lanes in the urban areas of Kansas City, Columbia and St. Louis. The high range option for improvements consisted of six lanes in the rural areas and six or more lanes in the urban areas of Kansas City, Columbia and St. Louis. At this time, MoDOT has not selected a final implementation plan for I-70. Other hybrids of these low and high range improvement options, including the use of truck-only toll lanes, could still be evaluated for the corridor within future studies.

Based on current traffic demand in the rural areas of I-70 and the project's toll funding capacity, the analyses results provided in this toll application assume implementation of an I-70 toll road based on providing a four-lane section in the rural areas with sufficient right-of-way to expand I-70 in the future when warranted. The rural sections of the I-70 Corridor would be significantly improved over current conditions and right-of-way would be preserved along the corridor to expand to six lanes in the future when warranted. Improvements to the rural sections of I-70 would include the following:

- Total reconstruction of pavement, interchanges and bridges along the corridor.
- Wider median to allow for future expansion and improved safety.
- Improved clearances for bridges and roadside.
- Full width inside and outside shoulders.
- Improved access management.
- Improved roadway alignment, including grades and horizontal and vertical curves.

The urban areas of Kansas City, Columbia and St. Louis would be reconstructed and widened to six or more lanes, depending on traffic projections. The majority of the improvements to the urban areas would be of a similar nature to those of the rural areas, with the exception that the urban areas would add capacity.

3. Age

Missouri's section of I-70 is approaching 50 years old. On June 29, 1956, President Dwight D. Eisenhower signed the Federal Aid Highway Act of 1956. In August 1956, just a few weeks after

the signing of the legislation creating the Interstate Highway System, the Missouri State Highway Commission awarded the first contract on the construction of I-70. Construction of I-70 continued for another nine years and now spans a distance of more than 250 miles across the state of Missouri.

Other than short reconstructed portions, the newest sections of I-70 are 36-years old. With proper maintenance provided by MoDOT, the facility has outlasted its original design life of 20 years and has carried traffic volumes of both cars and heavy trucks that have far exceeded the expectations of the original designers.

4. Condition

Pavement

The original pavement for I-70 was constructed between 1956 and 1965, with portions of incorporated US 40 being constructed in the 1940's. Since that time there have been numerous projects to rehabilitate, resurface and reconstruct portions of the roadway to maintain its structural integrity and provide a smooth riding surface.

Pavement rating information was compiled from available MoDOT data for each of the following:

- **Ride Condition Index (RCI)** – An index measuring the overall condition of the ride using standardized procedures.
- **Condition Score** – The calculation for this score is the result of a formula that includes separate measures for surface roughness, surface distress, and the Average Annual Daily Traffic (AADT).
- **Pavement Serviceability Rating (PSR)** – A subjective indicator of ride quality and surface roughness based on human observation utilized by FHWA prior to 1993.
- **International Roughness Index (IRI)** – An objective indicator of ride quality and surface roughness developed by the World Bank and utilized by FHWA starting in 1993.

Measurements for each rating were taken from MoDOT data at 0.02-mile (0.03 km) increments along the eastbound and westbound lanes of the existing I-70 highway. The average score for each rating was compiled for each county and for the entire corridor. Also for each rating, the length of roadway was categorized using five rankings (Very Poor, Poor, Fair, Good, and Very Good) and was compiled for each county and for the entire corridor.

The information shows that, depending on the rating used, between 34 percent and 53 percent of existing I-70 pavement is ranked as Poor or Very Poor. Only 25 percent to 39 percent of existing I-70 pavement is ranked as Good or Very Good. The following table summarizes the findings of the pavement condition analysis for the study corridor based on the four condition classification systems.

Summary of I-70 Pavement Conditions

Rating	RCI	Condition Score	PSR	IRI
Very Good	16%	17%	13%	3%
Good	22%	12%	12%	36%
Fair	24%	22%	22%	27%
Poor	12%	16%	17%	24%
Very Poor	26%	33%	36%	10%

MoDOT has recently announced its plans to resurface I-70 by 2007. This resurfacing program will temporarily extend the life of the riding surface until a more comprehensive reconstruction can be completed.

Bridges

Within the I-70 Corridor there are 130 bridges. The bridges over I-70 are deficient in more categories or in greater value than the bridges on I-70 and may require more immediate maintenance and repair to maintain adequate sufficiency and operation. The majority of the bridges in the corridor are in good to fair condition, but many will likely need major maintenance and rehabilitation over the next 30 years. Several structures are in need of immediate repair to keep them from dropping to critical condition and being closed.

5. Intensity

Traffic Trends on I-70

Traffic on I-70 has been increasing with time at a relatively consistent rate. An examination of historic average annual daily traffic (AADT) indicates that in some years growth was not consistent. These fluctuations in traffic volumes from one year to the next could be due to construction or opening of new roadways or other unknown conditions that cause a diversion of traffic to or away from I-70. The following table presents a 12-year history for five counties in which MoDOT maintains annual traffic counts on I-70 between Exit 15 (I-470) and Exit 210 (I-64/US 40), the study limits.

The count locations near the urbanized areas of Kansas City and St. Louis exhibit a greater average annual percent growth than do the rural locations. In Jackson County, traffic counts show an average annual percent growth of approximately 7 percent per year from 1990 to 2002. At the easterly limit of the study corridor, the growth in AADT averaged 4.5 percent per year over the same 12 years. Comparatively, the AADT's in the rural areas through which I-70 passes have average annual growth rates ranging from 2.3 to 3.3 percent per year. It is clear from this historic traffic review that the trend is towards higher future volumes on I-70.

I-70 Traffic Volume (AADT) by Year												
County	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2002
Jackson	49,800	50,000	51,800	57,200	58,800	60,400	58,700	61,400	66,900	76,100	90,300	91,300
Saline	18,700	19,100	20,000	20,600	21,000	22,200	22,600	23,100	23,400	24,200	24,600	25,100
Cooper	22,900	23,400	23,800	24,100	23,000	24,100	26,400	28,400	28,600	26,800	29,500	31,900
Callaway	22,100	22,700	23,600	23,000	23,400	21,400	27,300	28,300	29,000	29,500	29,900	28,200
St. Charles	41,900	41,600	42,500	46,700	49,700	53,100	55,200	58,500	60,300	63,600	64,000	64,400

The counter locations are Jackson Co. on I-70 at Route 7, Saline Co. on I-70 at Route 127, Cooper Co. on I-70 at Route 87, Callaway Co. on I-70 at US 54 and St. Charles Co. on I-70 at US 40/61.

Traffic Forecasts

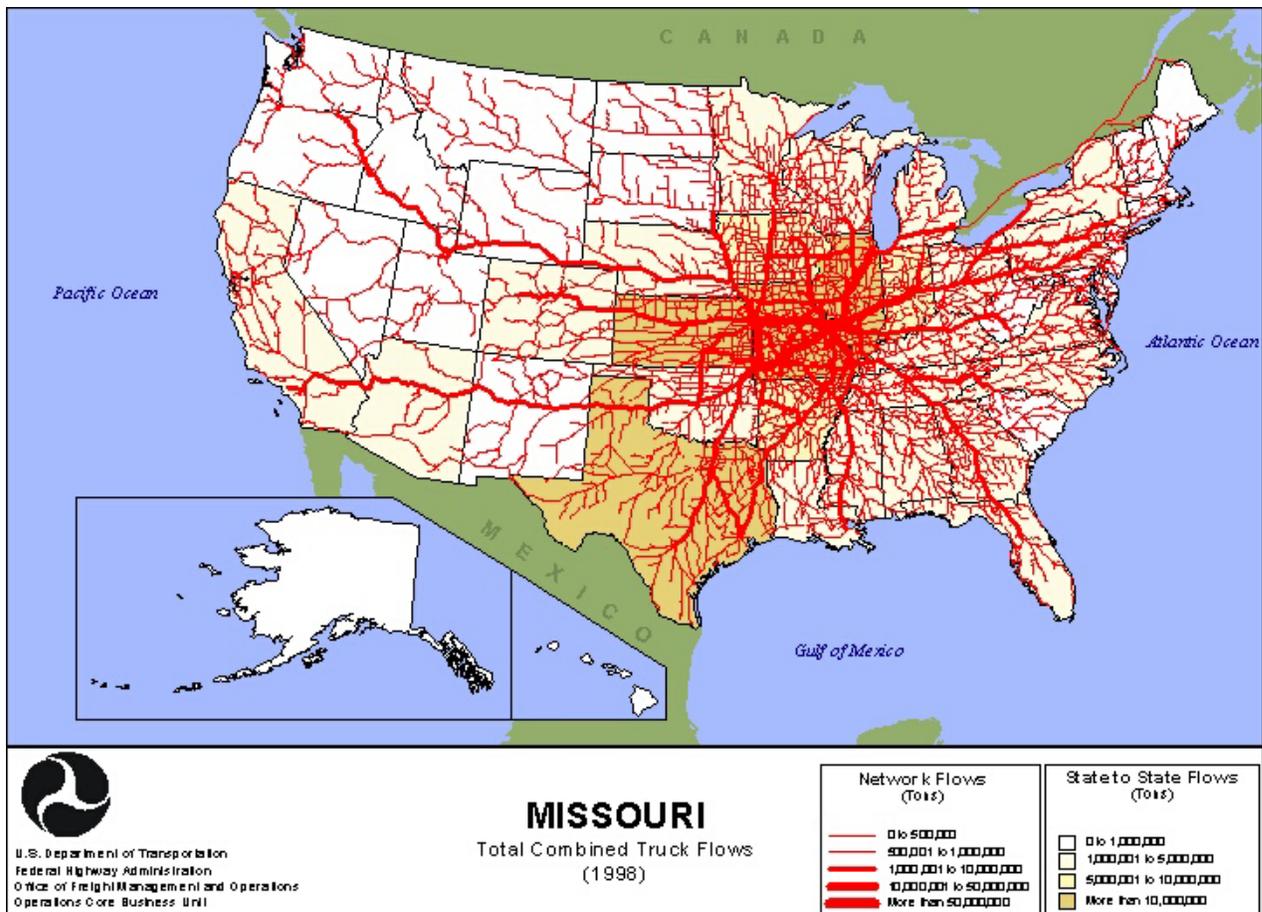
Significant increases in traffic are forecast for the entire corridor. The rural I-70 roadway links show the largest percentage increase in traffic from the year 2002 to 2030, while the urban I-70 roadway links continue to carry the highest daily volumes. The year 2002 average daily traffic along rural areas of I-70 are forecasted to double by the year 2030. As an example, near US 65 year 2002 average daily traffic is forecasted to grow from 25,500 to 66,900 by 2030, an increase of 162 percent. Within the urban areas of Kansas City and St. Louis, year 2002 average daily traffic is forecasted to grow from a range of 80,000 to 90,000 to a range of 110,000 to 130,000 by 2030.

Truck Traffic

Missouri is a critical link for truck traffic and acts as a crossroads for freight movements across the nation. The I-70 Corridor is a major east-west route that plays an important role in the national freight network. Truck traffic is found to be significant along the I-70 Corridor, especially within the rural areas, where trucks account for 30 percent of the corridor's traffic volumes. Truck traffic on I-70 has been steadily growing by an average of two or three percent per year for the past five years and is forecasted to continue this trend. With this high degree of truck traffic growth, given the lower growth of overall travel in the rural areas of the corridor (approximately one percent per year), over time trucks will represent a higher percentage of the total travel in the corridor.

As the percentage of truck traffic continues to grow in the rural areas of the corridor, the operations of the I-70 roadway will continue to degrade at an ever-increasing rate. Due to the degradations in operations, future congestion is estimated to add approximately 44 minutes to a truck traveling across the I-70 Corridor.

Freight Flows To, From, and Within Missouri by Truck: 1998



While a detailed study of truck-only toll lanes has not been conducted for the I-70 Corridor, future studies for I-70 could consider the application of truck-only toll lanes or other hybrids of the tolling concepts previously analyzed for I-70.

Level of Service

Using the base year (2002) and forecasted (2020 and 2030) traffic volumes along I-70, operational analyses were completed to determine the ability of the existing I-70 facility to serve the corridor's travel demands. In the base year, the urban areas of Kansas City, Columbia and

St. Louis already operate at unacceptable levels of service. The rural areas of I-70 operate at acceptable levels of service today, but are projected to operate at or above capacity by the design years 2020 and 2030. The existing operating conditions validate the low range improvement option for I-70, consisting of adding additional capacity to the urban areas of Kansas City, Columbia and St. Louis, but reconstructing and maintaining the current four-lane configuration in the rural areas with improved shoulders and median areas, but no new capacity until future traffic warrants expansion.

The results of the forecasted 2020 and 2030 levels of service analysis show that the I-70 roadway links do not have sufficient capacity to adequately serve the daily traffic demand. By the year 2020, a significant portion of the I-70 Corridor reaches unacceptable levels of service. In 2030, all I-70 roadway links will operate at or very near to an unacceptable level of service. Over 95 percent of the I-70 Corridor is forecast to operate at an unacceptable level of service by 2030. Those areas forecast to operate at an acceptable level in 2030 are very near the threshold for unacceptable level of service conditions. A five percent increase in daily traffic in 2030 would result in unacceptable level of service conditions throughout. The forecasted poor level of service conditions for the I-70 Corridor demonstrates the need for capacity enhancements along the corridor.

Crash Trends

The total number of crashes on I-70 within the study corridor has been increasing. In the period from 1995 to 2003 the annual crashes on I-70 have increased steadily, reaching a peak of 2,565 crashes in the year 2000. The increase in the number of crashes on I-70 over the study period primarily results from an increase in the traffic on I-70. The increase in traffic results in an increase in the density of vehicles resulting in less room for driver error.

To assess the severity of crashes, crashes are categorized as being fatal, injury or property damage only (PDO). Any crash that involves one or more fatalities is considered a fatal crash. If a crash involves injuries without any fatalities, then it is considered an injury crash. All remaining crashes are designated as property damage only. Fatal crashes along the I-70 study corridor during the study period made up 1.6 percent of all crashes for an average annual number of fatal crashes of 36. The average annual number of injury crashes over that same time period was 648 (28.6 percent). Property damage only crashes constituted 69.8 percent of all crashes.

In addition, heavy trucks were involved in 29 percent of all crashes and 33 percent of fatal crashes during the study period. Heavy truck crashes can be more severe because of the significant difference in size and weight of a truck compared to other vehicles. Heavy trucks accounted for approximately 23 percent of the vehicle-miles of travel within the I-70 Corridor.

Cross-median crashes have been a concern as a result of the relatively narrow median in many areas. During the study period, the average number of cross-median crashes per year was 47. Cross-median crashes are very often more severe because the colliding vehicles are traveling in opposite directions. Fatal crashes are only 2 percent of all crashes, while 16 percent of cross-median crashes result in at least one fatality. The percentage of cross-median injury crashes is also higher at 35 percent when compared to 29 percent for all crashes. Of all 213 fatal crashes during the study period, 45 fatal crashes were cross-median.

The total average crash rate for the I-70 Corridor is in the range of 90 to 93 crashes per 100 million vehicle miles traveled, compared to a statewide average crash rate for rural interstates in Missouri of 69.22 crashes per 100 million vehicle miles traveled. The total average fatality rate for I-70 is in a range of 1.3 to 1.5 fatalities per 100 million vehicle miles traveled, compared to a statewide average fatality rate for rural interstates of 1.16 and a nationwide fatality rate, according to the Fatality Analysis Reporting System (FARS), of 1.3 fatalities per 100 million vehicle miles traveled. This data shows that I-70 has a higher overall crash rate than the statewide average, as well as a fatality rate that is higher than both the statewide and nationwide averages.

Given the number of crashes along the I-70 Corridor, improvement of safety along the corridor is critical. As the volume of traffic on I-70 increases, the number of crashes will increase unless safety improvements are made. The vehicle-miles of travel in the I-70 study corridor are expected to more than double between 2000 and 2030. Without any safety improvements, at a minimum, the number of crashes can also be expected to double. The safety and economic prosperity of Missourians depend, in part, on a safe and efficient I-70.

The existing I-70 Corridor is also known to be an unreliable travel route. Due primarily to the high incident rates and the sensitivity of the corridor's operations, travel within the corridor is easily and frequently disrupted by incidents. MoDOT has difficulty maintaining traffic flows during normal and routine maintenance activities. MoDOT has recently mandated that all major rehabilitation on I-70 can only be performed at night due to increasing problems with long traffic queues and delays. The unreliability issues on I-70 not only affect travel times along the I-70 Corridor, but also the public's perception of the quality of travel through Missouri.

B. In the case of a facility that affects a metropolitan area, an assurance that the metropolitan planning organization established under 23 U.S.C. 134 for the area has been consulted concerning the placement and amount of tolls on the facility.

Improvements to I-70 affect three Metropolitan Planning Organizations (MPOs): Mid-America Regional Council (MARC) in Kansas City; Columbia Area Transportation Study Organization (CATSO) in Columbia; and East-West Gateway Council of Governments (EWGCOG) in St. Louis. There are no new MPOs anticipated in the future within the limits of the I-70 Corridor. During the First Tier process, coordination occurred with all three of the MPOs and that coordination is continuing through the Second Tier process. This coordination involved discussions about the preferred strategy for the I-70 Corridor.

While the corridor itself falls within the boundaries of the MPOs, the toll collection plazas would not. Toll plazas are planned to be located outside the limits of the metropolitan areas.

The MPOs have not been fully consulted concerning the possibility of tolling I-70. A future action item in Section G will be to provide coordination with the MPOs on MoDOT's approach to tolling I-70.

C. An analysis demonstrating that the facility could not be maintained or improved to meet current or future needs from the State's apportionments and allocations made available by the TEA-21, including amendments to the act, and from revenues for highways from any other source without toll revenues.

1. Funding Analysis

The estimated construction costs for the I-70 project exceed the available federal, state and local funding sources and the project cannot be advanced without the collection of tolls. MoDOT estimates that the current funding shortfall in Missouri is between \$1 and \$2 billion annually. Missouri has the seventh largest transportation system in the nation and ranks very low, around 44th in the nation, in revenue per vehicle-mile traveled. The I-70 project is estimated to cost within a range of \$2.7 to \$3.2 billion in 2006 dollars. The cost estimate is preliminary and is based on the best information available at this time in the project's development within the I-70 Second Tier Environmental Studies.

The Missouri Department of Transportation's Statewide Transportation Improvement Program (STIP) for fiscal year 2004 to 2008 outlines the current amount of funding available. The STIP, prepared annually, sets forth the specific construction projects MoDOT will undertake in the next five years. It is the project-specific product that tells Missourians what improvements to expect on their transportation system during this period. Currently, some rehabilitation/reconstruction projects for I-70 are included within the 2004 to 2008 STIP; however, it is clear that not enough funding is available within the plan to meet the reconstruction and expansion needs of I-70. The I-70 project is located within MoDOT Districts 2, 3, 4, 5 and 6 and the committed projects for I-70 are shown in the document within those sections. Relevant sections of the STIP are attached to this application.

In November 2004, the voters of Missouri chose to end the diversion of highway user fees and redirect the funds to MoDOT. As a result, MoDOT will have an additional \$180 to \$190 million annually to build and maintain Missouri's highways and bridges. Amendment 3 will allow the Department to make some progress in improving the general condition of the state's highway system. The first phase of the Smoother, Safer, Sooner Program will entail an initiative to provide smoother roads. This initiative, to be completed by the end of 2007, will resurface and refurbish approximately 2,200 miles of Missouri's roads – roads carrying roughly 60 percent of the state's travel. Included in this initiative is I-70. Upon the completion of the Smooth Roads Initiative, the I-70 Corridor will have a smooth driving surface, new pavement markings, improved guardrail, and more visible signage. This initiative will provide topical, surface-related improvements, but will not reconstruct the corridor or address the corridor's core problems. The Smooth Roads Initiative will maintain the life of the corridor for five or more years, but will not address the problems indicative of a 50-year old highway. The Smooth Roads Initiative is only a temporary fix for I-70.

The subsequent phases of the Smoother, Safer, Sooner Program will entail accelerating existing project commitments throughout the state and advancing new high-priority projects. At this point, those projects to be accelerated have not yet been identified. It is anticipated that only those projects currently in the STIP would be candidates for acceleration. Similarly, the program's high-priority projects have not yet been identified. Utilizing MoDOT's statewide planning process; these projects will be identified by May 2005 and will be included in the next STIP update, 2006 to 2010. Though some important projects will be able to be advanced by virtue of Amendment 3, other than the Smoother Roads Initiative, I-70 will not be impacted by the additional funding. The magnitude of the I-70 need is too great. Even if all of the Amendment 3 funding was dedicated to I-70, it would fall well short of the I-70 Corridor's needs, and no other improvements in the state would be realized.

Funding for Missouri is projected to be around \$1.115 billion per year over the near term, based on currently anticipated federal and state revenue sources. This projection assumes some additional funding for Missouri with the reauthorization of TEA-21. Allocation of these funds is based on the following: \$128 million in federally sub allocated funding designated for specific purposes by USDOT; \$18 million for other modes including ports, aviation, transit and rail; \$30 million for economic development and cost sharing projects statewide; \$75 million for debt service (based on \$900 million in bonding); and \$864 million available for highway and bridge preliminary engineering, construction engineering, right-of-way and construction funding. Of the \$864 million available for construction, \$125 million per year is designated to rehabilitate/reconstruct Interstates. While I-70 would get a portion of this funding per year, it would have to be shared with the other Interstate facilities within the state. The I-70 Corridor from I-470 to I-64/US 40 makes up less than 15 percent of the Interstate system in Missouri, but its demands exceed this proportionment. I-70 could at best be allocated one half of the annual interstate funding. Given that approximately between \$25 and \$30 million per year is needed just to maintain I-70 in its current condition and configuration, under these funding projections and allocations, Missouri must have additional funding if I-70 is to be reconstructed in any reasonable timeframe.

MoDOT understands that it may take several funding options to improve the I-70 facility, including toll revenue bond financing, the state road fund, federal earmarks and debt. It is unknown at this time if federal earmarks will be available. TEA-21 reauthorization is ongoing in 2005 and should give an indication of its feasibility as a funding source. MoDOT's current funding distribution of roughly \$1.115 billion is based on the assumption that some growth beyond the range of annual distributions from the current TEA-21 program will be realized with the reauthorization. MoDOT believes that toll revenue bond financing, in combination with other funding resources, offers the only alternative for financing the I-70 project. An improved facility can not be delivered within a reasonable timeframe without toll revenue bond financing. If limited to MoDOT's currently projected funding levels and distribution, it will likely take over 40 years to reconstruct the corridor. Interstate 70 is one of the highest priority projects within the state and is critical to the state's economic vitality. Securing additional funding is vital to reconstructing the existing roadway, improving safety, bringing the facility up to current standards, and increasing capacity.

D. Facility Management Plan

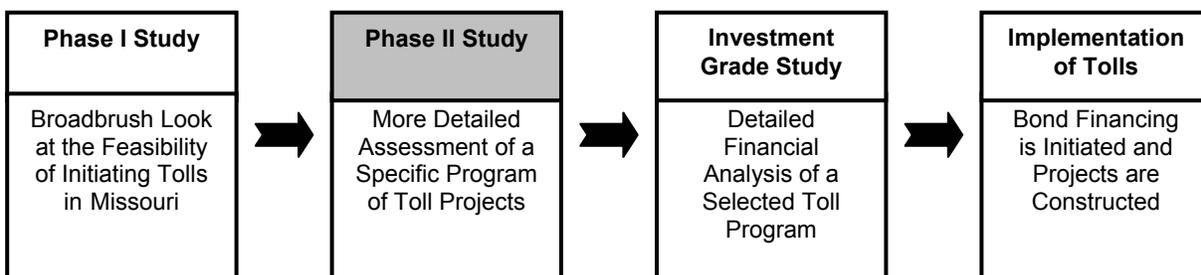
1. Toll Implementation Plan

MoDOT recently completed the Phase I Toll Feasibility Study in 2002. The purpose of the Phase I study was to estimate the potential revenue that could be generated from 23 candidate toll projects within the state. The I-70 project was one of the 23 projects considered. Phase I was a preliminary, planning-level feasibility assessment, conducted as the first of two phases, and was not conducted to a sufficient level of detail to be used in support of actual project financing, but was of sufficient precision to identify those projects that could be financially feasible as toll facilities. The initial screening process retained five of the candidate toll projects that were considered to have high or medium potential for tolling and the I-70 project was included within this list.

The Phase II study was developed to further focus on the potential feasibility of tolling any or all of the remaining candidate toll projects which passed the initial screening review in Phase I. The Phase II Toll Feasibility Study, which is a more detailed assessment of the project, was completed in spring 2004. This Phase included a better level of precision for stakeholder coordination, policy decision-making and system implementation planning. The purpose of the Phase II study was to look at the feasibility of implementing tolls in Missouri by estimating the possible funding for construction through toll revenue bond financing and then comparing it to the project construction cost. Those projects that cover all or the majority of funding of the project construction costs through toll revenue bond financing or have an excess of funding would be considered “feasible” for tolling.

The figure shows the overall planning process assumed in the toll feasibility studies for I-70 toll implementation. The I-70 toll implementation process assumed the utilization of the low range option, which consists of four lanes in the rural areas, with right-of-way to expand to six lanes when warranted in the future, and six or more lanes in the urban areas of Kansas City, Columbia and St Louis. Depending on the toll rate assumed (from \$2.00 to \$3.00 per toll plaza for passenger vehicles), Phase II found that the I-70 project was approximately 70 to 100 percent financially feasible for toll implementation. Next, MoDOT will conduct an Investment Grade Study of I-70, including traveler information surveys, more detailed economic and traffic analyses in support of actual project financing. The next phase of the toll implementation process could also look at other hybrid tolling concepts for the I-70 Corridor, including truck-only toll lanes, to further determine the best implementation plan for I-70.

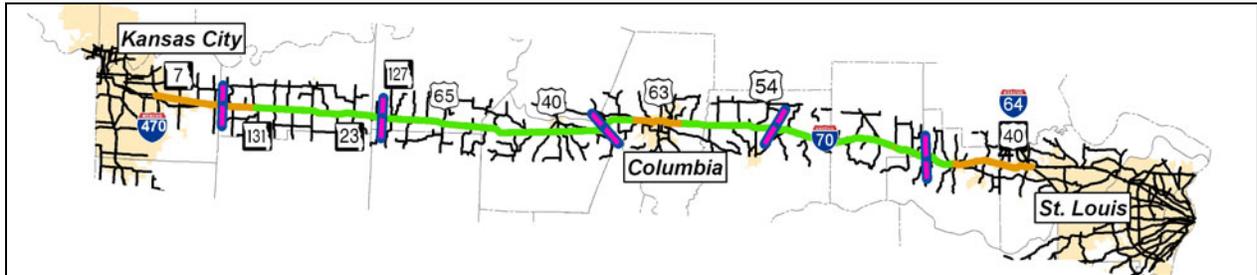
I-70 Toll Implementation Process



Within the Phase I and II feasibility studies, the I-70 project was planned to be an open-barrier toll system with multi-functional toll collection comprised of manual, automatic coin and electronic toll collection (ETC). Toll Collection included ETC express lanes. Mainline barrier toll plazas were located at five locations along the corridor, as shown on the following figure. Plaza locations are preliminary at this time and will need to be finalized during the Investment Grade Study.

The earliest Missouri could toll any part of I-70 is when a substantial section of the I-70 toll program has been initiated. Such an acknowledgement will be included in the agreements outlined in Section G. The rollout of tolls will depend upon the timing of the bond issuance, the initiation of the toll program, and the sequencing and timing of construction.

I-70 Toll Plaza Locations



LEGEND

— 4 to 6 Lanes — 6 or More Lanes — Barrier Toll Plaza

2. Schedule and Finance Plan

Schedule

The following figure shows a possible implementation schedule for the I-70 toll project. This schedule is contingent on the project and construction delivery method. The schedule assumes toll project authorization by the fall of 2005. The toll project authorization could be initiated through a variety of project delivery methods, including an I-70 Transportation Corporation or through Missouri legislature and voter approval of a Missouri Toll Authority. MoDOT has been working closely with state legislators on the tolling initiative and is coordinating the public and stakeholder outreach on the tolling initiative in Missouri. Missouri already has enabling legislation to form transportation corporations through the Missouri Transportation Corporation Act of 1990.

Rapid and efficient implementation of the I-70 project would continue to reduce the effects of construction on motorists, and would accelerate the benefits of the program. Fast response to the pressures in the corridor requires an accelerated construction delivery method – Design-Build. Following completion of the environmental documents, preliminary or schematic design plans would be developed for each construction package. Utilizing the schematic design, a Design-Build Team would be retained for each package through a competitive bidding process. Each Team would then simultaneously complete the design while constructing the project. Such an approach would enable MoDOT to acquire right-of-way and begin construction approximately 18 to 24 months earlier than by the traditional Design-Bid-Build method.

Highest priority is placed on the metropolitan areas where the needs are greatest – approaching Kansas City and St. Louis, and through Columbia. A construction sequencing plan would be developed to address the problems and priorities within the corridor as quickly as reasonably possible.

Implementation Schedule

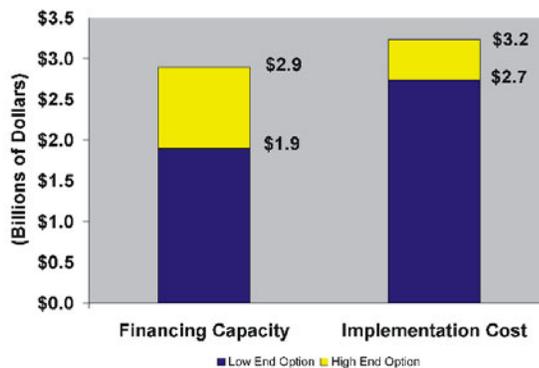
Project	2005	2006	2007	2008	2009	2010	2011	2012	2013
I-70 Corridor	Investment Grade Study								
	EIS Re-evaluation								
	Toll Project Authorization								
	Financing								
	Preliminary (ROW) Plans								
	ROW Acquisition								
	Final Design								
					Construction				

Finance Plan

The project feasibility results from the Phase II Toll Feasibility Study determined that toll revenue bond financing is anticipated to generate a funding capacity of \$1.9 to \$2.9 billion for the I-70 project, compared to a construction cost of \$2.7 to \$3.2 billion. The financing capacity is the amount of money that would be available through toll revenue bonds for the construction improvements. The range reflects analyses of different toll rates (\$2 to \$3 toll rate per passenger vehicle per plaza). Commercial vehicles would be 2 to 4 times the rate for passenger vehicles. The revenue bond financing assumed 40-year toll revenue bonds.

In addition to the implementation schedule, a time line showing the appropriate action items that will lead to the creation of toll project authorization will be included as a part of the financial plan. A commitment to provide a formal finance plan for the project is shown under Section G.

Financing Capacity versus Construction Cost



When comparing the financing capacity to the I-70 construction costs for the low-end option (i.e., 4-lane), if a \$2.00 toll rate is assumed, a financing gap of around \$800 million would exist. Should a \$3.00 toll rate be assumed, the bonding capacity is projected to exceed the construction cost for the project. Under either toll rate scenario, the toll rates fall well within the acceptable range given Missouri's general market conditions.

MoDOT understands that it may take several funding sources to improve the I-70 facility, even with the use of toll revenue bond financing. Toll revenue bond financing, in combination with other federal, state or local sources of funding, such as the state road fund, or federal earmarks, could be used to totally fund the construction costs for I-70.

A commitment to provide a formal finance plan for the project is shown under Section G. The finance plan to be developed will cover the sources and allocation of the additional revenue that may be needed and the effect the I-70 toll project would have on Missouri's overall statewide transportation program.

3. Responsible Public Agency

The Missouri Highways and Transportation Commission is currently responsible, directly or indirectly, for Missouri's Interstate highways. As such, it is envisioned that the Commission will be responsible for implementation and administration of the I-70 pilot toll project. The Commission is a six-member bipartisan board that guides MoDOT. Commission members are appointed by the governor and confirmed by the Missouri Senate. No more than three commission members may be of the same political party. The term on the commission is six years. The plan for the Commission to act as the responsible public agency may be contingent on possible legislation, but this serves as the likely plan for the governance of the tolling authority.

4. Consideration of Privatization

At this stage in the planning process for I-70, MoDOT has not fully evaluated the benefits of privatization. A wide range of possible applications of privatization would exist, ranging from a developer franchise to outsourcing of toll collection operations and/or maintenance. Regardless of the project finance method, possible uses of the principals of privatization would be available. MoDOT is committed to the full consideration of privatization in the I-70 toll initiative. The extent upon which it may be considered could be dependent upon the possible legislation enacted that authorizes the toll initiative. It is anticipated that regardless of the role of privatization, MoDOT would retain the legal and administrative control of the facility. An acknowledgement of MoDOT's consideration of privatization is included in Section G.

E. Show how the implementation plan for implementing tolls takes into account the interests of local, regional and interstate travelers.

A detailed public outreach program was conducted as a part of the I-70 First and Second Tier Environmental Studies. The program incorporated public involvement activities including public informational meetings, a project web site, project mailings, project presentations to interested parties and other public involvement outreach activities. Results of the public involvement program showed that local, regional and interstate travelers wanted greater separation from truck traffic on I-70, improved safety features, such as a wider median, improved rest areas, increased capacity and better pavement condition.

In addition, a significant statewide public outreach effort is being conducted for MoDOT's Planning Framework and as a part of the update to the Missouri Long-Range Transportation Plan (LRTP). MoDOT has developed a Planning Framework that provides consistent, objective methods for involving local officials in identifying transportation needs and prioritizing transportation projects. The LRTP update includes numerous outlets for the public to provide input into the future planning process for Missouri, including public meetings, surveys, community interviews and community advisory groups.

A rest area study was completed as part of the I-70 Second Tier Environmental Studies. The study determined that the four existing rest areas along the I-70 Corridor should be upgraded and consolidated to three rest areas. The rest areas would then offer more amenities, improved conditions, and double the amount of parking that currently exists along the I-70 Corridor today. In addition, all current access to truck stops, lodging, restaurants, etc. along the corridor would be maintained.

As can be seen on the I-70 Toll Plaza Locations map in Section D, toll plazas are located outside the limits of the major metropolitan areas of Kansas City, Columbia and St. Louis. Toll plazas are strategically located to minimize the penalties to local users and make travel on the toll facility as equitable as possible. In addition, electronic toll collection (ETC) is being offered to frequent users or commuter traffic along I-70 to minimize delays caused by having to stop and pay a toll.

The modernization of the I-70 Corridor includes capacity improvements to the corridor, a wider and safer roadway and roadside, and the ability to expand in the future. Analyses have shown that reducing traffic to one lane in each direction along I-70 would cause unacceptable delays, with traffic backups extending miles upstream of the construction zone. Therefore, construction of the I-70 improvements will be staged in a way that maintains four open travel lanes at all times. This requires an extra-wide median to make the best use of existing lanes while the new lanes are built. Rapid and efficient implementation of the I-70 project would continue to reduce the effects of construction on motorists and would accelerate the benefits of the program.

MoDOT is currently coordinating the Phase II Toll Feasibility Study process in order to inform the public and other interested parties about the concept of tolling in Missouri. At this time, MoDOT does not have a clear sense of the local, regional and interstate traveler's perspective on tolling in Missouri. As a part of future toll implementation planning, MoDOT will develop a public outreach program to better gauge the public's perception to tolling I-70. This commitment is acknowledged in Section G.

F. Provide an environmental scoping analysis of the proposed project's impacts to the social, economic, and environmental resources located in the vicinity of the project. The analysis should show what effect the proposed construction, as well as the imposition of tolls may have on the resources.

As stated above, a First Tier EIS has been completed for I-70, in compliance with the National Environmental Policy Act. MoDOT is carrying forward the Second Tier Studies identified in the First Tier EIS. These Second Tier Studies are necessary to further study and define the improvements to I-70 such that more detailed analyses of the environmental impacts can be performed to more precisely evaluate the impacts of the project. The limits of each section of independent utility (SIU) are shown in the following map.

The determination of the appropriate type of environmental process to be utilized for each individual SIU depends on the nature of the improvements and the anticipation of the degree and significance of the potential impacts of the improvements. There will be two Environmental Impact Statements, four Environmental Assessments, and one Categorical Exclusion.

The First Tier EIS provided guidance on the nature of the improvements and the potential significance of environmental resources and social impact issues potentially impacted by the Preferred Strategy. This guidance provided support for the determination of the appropriate type of second tier study for each SIU.

I-70 Sections of Independent Utility from I-70 Second Tier Studies



1. Environmental Impacts

Through a comprehensive review of the potentially affected environment and environmental consequences during the First Tier EIS, no known issues were identified that would necessarily preclude or prevent the implementation of the Widen Existing I-70 Strategy. However, there were a number of environmental issues that will need further investigation as part of Second Tier Studies. These investigations will need to include considerations of avoidance, minimization of impacts, and appropriate mitigation. As part of either the Second Tier Studies or the subsequent design development, regulatory and construction permits will be required. Necessary regulatory permits include Section 404 of the Clean Water Act, administered by the U.S. Army Corps of Engineers, and Section 9 and Section 10 of the Rivers and Harbors Act, administered by the U.S. Coast Guard and the Corps, respectively. Construction will adhere to existing agreements between MoDOT and the Missouri Department of Natural Resources, which include a water pollution control program and established best management practices.

A summary of the environmental impact issues includes:

- **Noise Impacts** – In the rural areas, the project has the potential to create noise impacts to adjacent residences due to widening the right-of-way. Relocation options around the Columbia and Warrenton/Wright City/Wentzville areas would introduce highway noise where such noise does not exist. Additional investigation of potential noise impacts and mitigation measures, if any, will be conducted in the Second Tier Studies.
- **Parklands, Wildlife Refuges, Recreation Areas and Public Lands** – Potential impacts by the project to several existing or planned parklands, or other public lands, have been identified. Each of these sites will be studied further as part of the Second Tier Studies, including a Section 4(f) evaluation if impacted. A number of parklands were identified in the relocation corridors around the Columbia and Warrenton/Wright City/Wentzville areas. However, options exist to avoid these sites. Below are the key areas that will require special consideration during the Second Tier.
 - ✓ KATY Trail State Park
 - ✓ Harriman Hill Access Area on the Lamine River
 - ✓ Big Muddy National Wildlife Refuge
 - ✓ Overton Bottoms Conservation Area
 - ✓ Graham Cave State Park
- **Prime Farmland** – The project would impact prime farmland. More detailed assessments and estimates of the impacts will be performed in the Second Tier Studies, including the Farmland Conversion Impact Rating for Corridor Type Projects.
- **Water Quality** – The current water quality conditions would not be degraded by the project activities. Standard measures currently in place would be implemented to reduce impact to receiving waters during construction. The rebuild of the present facility would be favorable for the implementation of present day best management practices regarding control and treatment of highway runoff to receiving waters. Some types of best management practices may include grassy swales, detention basins and passive treatment systems placed in designated areas.
- **Floodplains** – Several floodplains would be crossed by the project. With the exception of the possible relocations of the Columbia and Warrenton/Wright City/Wentzville areas, I-70 already crosses these floodplains. The project will entail in general the replacement in kind of all existing I-70 floodplain crossings. Major floodplain crossings and floodplain complexes include:
 - ✓ Blackwater River

- ✓ Lamine River
 - ✓ Missouri River
 - ✓ Loutre River
- **Wetlands** – Impacts to wetlands would occur. Additional study and delineation of existing wetland resources will be performed during the Second Tier Studies. Special attention will be given to the Overton Bottoms area and the other major floodplain crossings.

Additionally, Wetland Reserve Program (WRP) lands will be identified and any impacts will be evaluated, and if appropriate, mitigation and/or conversion procedures will be followed. Coordination will take place with the NRCS and FWS, as necessary.

- **Terrestrial and Aquatic Communities** – Sensitive biological resources potentially impacted by the project that require more detailed study include:
 - ✓ Buffalo grass (located near Boonville rest area)
 - ✓ Blacknose shiner (located near Whetstone Creek)
- **Threatened and Endangered Species** – No known critical habitat would be impacted by the project. However, informal consultation with the U.S. Fish and Wildlife Service will continue during the Second Tier Studies.
- **Historic and Archeological Resources** – Archaeological sites, National Register properties, and cemeteries were identified within the vicinity of the existing I-70 right-of-way. It has been determined that each of these sites will require additional study and coordination.
- **Hazardous Waste Sites** – No known hazardous waste sites would be impacted.

2. Social and Economic Impacts

Interstate 70 has created a development spine across the state that has grown in intensity and breadth. It is anticipated that the Widen I-70 Strategy will continue this development trend, and to some extent, accelerate its growth due to the improved access provided at the interchanges and the slightly higher traffic volumes.

As part of the Second Tier Studies and subsequent design development, additional consideration will be given to the direct impacts of the project to adjacent properties and structures, particularly at the interchange areas. Additional studies at each interchange area will be needed to minimize the direct impacts of the project to existing residences and businesses. Furthermore, considerations will be given to maintenance of traffic during construction to minimize the temporal impacts of construction on adjacent businesses.

The NEPA process as it relates to I-70 has not included impacts associated with converting a free interstate facility to a toll facility, such as potential changes in travel patterns, construction of toll collection facilities and economic equity issues. The First and Second Tiers have looked strictly at the widening of I-70. A supplemental document will need to be prepared once the Second Tier documents have been completed, to address the toll impacts as they affect the entire I-70 Corridor.

G. Required Future Actions

It is understood that MoDOT is responsible for developing and/or providing several documents or agreements that are required as part of Phase 1 or Phase 2 approval. These include the following:

1. NEPA Process: MoDOT fully recognizes that the NEPA process must be completed in a timely manner and, if MoDOT does not do so, the acceptance by FHWA as a pilot project may be

withdrawn. It is recognized that the NEPA impacts of this proposed pilot project will not only involve those associated with the reconstruction activities but those associated with converting a free interstate facility to a toll facility, such as potential changes in travel patterns, construction of toll collection facilities and economic equity issues. If the ongoing NEPA process for I-70 is completed prior to toll project authorization, it is understood that an environmental re-evaluation in coordination with the FHWA would need to be conducted to consider the impacts of activities associated with converting a free interstate to a toll facility.

In addition to the NEPA Process, MoDOT also recognizes that there are other factors that could affect the advancement of the I-70 project in Missouri. Some of these factors could include, but are not limited to, the inability to get stakeholder consensus on the project in Missouri and the inability to secure additional funding from the state road fund or other state revenue sources, if necessary, to supplement the remainder of the implementation cost of the project which is not able to be generated through toll revenue bond financing.

2. Metropolitan Planning Organizations: MoDOT will provide written verification that all affected MPOs have been consulted concerning MoDOT's approach to tolling on I-70, including placement and amount of tolls.
3. Public Involvement Plan: A public involvement plan will be developed to ensure the interests of local, regional and interstate travelers as it relates to tolling the I-70 Corridor. The plan will include public information meetings on tolling, presentations for community service groups and interested parties, public mailings and other forms of public outreach. For the public involvement plan, MoDOT will coordinate with the Missouri Division of the FHWA on development of the plan.
4. Customer Service Plan: MoDOT will develop a customer service plan in order to evaluate the success of the I-70 toll pilot program. MoDOT will develop an approach for evaluating the I-70 toll pilot program and are committed to following this approach once tolling is implemented on the corridor. For the development and approach to the customer service plan, MoDOT will coordinate with the Missouri Division of the FHWA.
5. MoDOT/FHWA Agreement(s): An agreement or agreements will be executed that include the following items:
 - a. FHWA and MoDOT will need to enter into an agreement providing that all toll revenues received from the operation of a toll facility will only be used for debt service, to include repayment of transfers from the Missouri state road fund, if state road fund monies are necessary to implement the project as a toll facility, reasonable return on investment of private funding, and costs for proper operations and maintenance.
 - b. It is understood that no Interstate Maintenance funds can be used on the facility for which tolls are being collected.
 - c. FHWA and MoDOT will need to enter into an agreement providing for regular (at least annual) audits to be completed and the results submitted to the FHWA to ensure compliance with FHWA requirements. This agreement will also allow for access to all records upon reasonable notice.
 - d. FHWA and MoDOT will need to enter into an agreement specifically addressing the period of toll collections, that will be a minimum of ten years, and the plan for the facility to become a free facility at the end of the toll collection time period (MoDOT's current financial analysis shows 40-year revenue bonds for at least forty years of toll collection).
 - e. It is fully understood that any authority given to toll I-70 is contingent upon satisfactory completion of the NEPA process.
6. Authorization: Complete enabling state toll legislation as necessary to allow MoDOT and MHTC to own and operate toll facilities, or to thereby authorize and enable the toll initiative.

7. Business Plan: The development of a business plan, which will detail the start-up plan for the tolling authority and the structure for toll collection along the I-70 Corridor.
8. Operations and Maintenance: MoDOT will consider outsourcing of operations and maintenance of the toll facility, as appropriate, as defined within the enabling toll legislation or authorization. However, MoDOT will be responsible for the implementation and administration of the toll facility and retain legal control.
9. Toll Sequencing: MoDOT will not toll any portion of the I-70 Corridor until substantial work is completed on sections where the tolls are being imposed.
10. Finance Plan: MoDOT will adhere to the requirements found in Section 1216(b)(3)(D)(ii) to provide an adequate finance plan for the project, similar to what would be required for a major project. Within the finance plan, a timeline showing the appropriate action items that will lead to implementing final tolling authority will be included.

H. Summary

In summary, MoDOT feels that the I-70 Corridor meets the criteria designated by the FHWA to participate in the Interstate Reconstruction and Rehabilitation Pilot Program. The reconstruction and rehabilitation of the I-70 Corridor cannot be achieved or functionally improved within a reasonable timeframe without utilizing toll revenue bond financing. Missouri's section of I-70 is approaching 50 years old and has long outlasted its original design life of 20 years. In addition, it has carried traffic volumes of both cars and heavy trucks that have far exceeded the expectations of the original designers.

MoDOT has made it a priority to get the NEPA process and the toll feasibility study process completed for the I-70 project in order to position the project for successful implementation. MoDOT feels that the I-70 project is a strong candidate for the pilot program and appreciates the FHWA's favorable approval of the toll pilot program application.